## REMARKS

Claims 1-10 are pending in the present application, of which claim 1 is the sole independent claim. Claim 7 has been amended. Support for the amendment to claim 7 is found on page 1, line 25.

Claim 7 was rejected under 35 U.S.C. §112, second paragraph, for not stating explicitly the weight or volume basis of the percentage limitation. Applicants have amended the claim to recite the percentages as "weight %," in accordance with the statement on page 1, line 25 of the specification, that all percentages are by weight.

Claims 1 and 2 were rejected under 35 U.S.C. §102(b) over Mansson. The Office Action states that Mansson discloses a ratio of (moles bisulfite moles hydroxide)/moles borohydride "from 4.9 to 19.8." In a telephone conversation with the undersigned, the Examiner explained that these numbers were derived by taking the 8:1 to 20:1 bisulfite borohydride ratios of Mansson (Col. 3) and subtracting the ratio of hydroxide borohydride in Borol<sup>TM</sup> solution (Col. 1). Applicant respectfully submits that, in the bisulfite borohydride ratio of Mansson, the amount of bisulfite is the actual amount of available bisulfite ion in solution, i.e., the amount of bisulfite remaining after some is consumed by hydroxide. This is evident from the description in Mansson, which calls for a "ratio between bisulfite ions and borohydride ions" that is "at least stoichiometric" to assure "as complete reaction of the borohydride as possible" (Col. 3, lines 38-43). To accomplish this, the amount of hydroxide must be subtracted from the total amount of sodium bisulfite prior to calculating the ratio, so that the 8:1 ratio of Mansson is the "ratio between bisulfite ions and borohydride ions" that actually exist in solution. If one starts with 8 moles of sodium bisulfite for every mole of borohydride, and there is considerable hydroxide added with the borohydride, one will not have the required stoichiometry of 8:1 bisulfite ion:borohydride ion. For example, when using 12% sodium borohydride stabilized with 40% NaOH, the actual amount of sodium bisulfite added must be much larger, as shown in the equation from page 3, lines 16-17 of the present specification:

$$[NaBH_4 + 3.2 NaOH] + 11.2 NaHSO_3 \rightarrow 4 Na_2S_2O_4 + (NaBO_2 + 3.2 Na_2SO_3 + 9.2H_2O)$$

Moreover, Mansson teaches use of a sodium borohydride solution containing much less hydroxide, only 0.2 moles NaOH per mole of borohydride (Col. 3, lines 24-27). For this solution, even if one ignored the hydroxide in doing the calculation, and used only 8 moles sodium bisulfite for every mole of borohydride, the NaOH would neutralize only 0.2 moles of bisulfite, still leaving one with a 7.8:1 ratio of bisulfite ion to borohydride ion. However, Mansson appears not to be doing this reaction with such a deficit of bisulfite, as shown by the quantities in Example 1. 1 L of sodium borohydride (SBH) solution having 25% SBH and 5% NaOH contains

250 g SBH (mol. wt. 37.83, 6.609 moles) and 50 g NaOH (mol. wt. 40.00, 1.25 moles). 56 L sodium bisulfite (SBS) solution having 12% SBS contains 6720 g SBS (mol. wt. 104.06, 64.578 moles). Therefore, (moles bisulfite moles hydroxide)/moles borohydride = (64.578-1.25)/6.609 = 9.58. This is consistent with Mansson's teaching of using excess bisulfite ion to ensure complete reaction of borohydride.

For the reasons stated above, Applicants believe that claims 1 and 2, as well as dependent claims 3-10, are not anticipated or suggested by the prior art.

Claims 1 and 2 were provisionally rejected over claims 1, 3 and 5 of copending Application No. 10/465,433 in view of Mansson. The Office Action alleges that claim 3 teaches a ratio of (moles bisulfite moles hydroxide)/moles borohydride from -29.4 to 14.4. This range appears to have been derived by using opposite extremes from the ranges disclosed in claim 3. Such an approach is unlikely to yield reasonable results, as shown by the large negative number obtained as a minimum. A negative number results from having more moles of hydroxide than of bisulfite, a condition that would neutralize all of the added bisulfite, leaving none to react with the borohydride. Claim 3 in no way suggests making such a combination of reagents, and the secondary reference, Mansson, actually teaches away from having a ratio less than 8, as described above in response to the Section 102 rejection. Accordingly, the cited claims cannot render the present claims obvious.

Applicants acknowledge the provisional double patenting rejection over copending Application No. 10/832,182 in view of Mansson, but will not respond at this time, as the '182 application has not yet been examined.

Applicants believe that the foregoing amendments and remarks have placed the claims in condition for allowance, and request that the claims be allowed and passed to issue. However, if the Examiner has any further objections to the application, Applicants respectfully request that the Examiner contact Applicants' undersigned attorney by telephone at (847) 649-3891 to discuss the remaining issues.

Respectfully submitted,

Kenneth Crimaldi

Kenth Calli

Attorney for Applicant Registration No. 40,968

Telephone No.: (847) 649-3891

Rohm and Haas Company 100 Independence Mall West Philadelphia, PA 19106-2399 December 20, 2005